

5733

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic

Sheet No. 3

State NEW YORK

LOCALITY

South Shore - Long Island
Jamaica Bay
Head of Bay to Barren Island

1934

CHIEF OF PARTY

M. O. Witherbee

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 3REGISTER NO. **5733**State New YorkGeneral locality South Shore - Long IslandLocality Head of Bay to Barran IslandScale 1:10,000 Date of survey June 21 to Oct. 19, 1934Vessel Sachem Shore Party No. 2Chief of Party M. O. WitherbeeSurveyed by G. A. StantonProtracted by LCA, W. N. M.Soundings penciled by LCA, W. N. M., G. C. M.Soundings in ~~fathoms~~ feetPlane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by Jam McCormickVerified by Jam McCormick

Instructions dated _____, 192

Remarks: _____

45

Hydro

1315733

The plane table work of Hook Creek in Lat. $40^{\circ} - 38.2'$, Long. $73^{\circ} - 44.6'$ (Topo Sheet "D") does not agree with the Aerial Topographic Sheet. Therefore I believe that it would be better to use the shoreline from the ^{given} Aerial Topographic Sheet in preference to the plane table work.

G. C. McGlosson

HYDROGRAPHIC SHEET

No Descriptive Report received todate: May 1, 1935.

HYDROGRAPHIC SURVEY NO. 5733

Smooth Sheet 1

Boat Sheet 1

Sounding Records yes 15 Vols. 15

Descriptive Report No

Title Sheet No

List of Signals no

Landmarks for Charts (Form 567) yes - various sound

Statistics no

Approved by Chief of Party no

Recoverable Station Cards (Form 524) _____

Special Chart for Lighthouse Service yes
(Circular Nov. 30, 1933)

Remarks No Descriptive Report received to date: May 1, 1935

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **.5733**

The following statistics will be submitted with the
cartographer's report on the sheet:

Number of positions on sheet	..4868
Number of positions checked165
Number of positions revised17
Number of soundings recorded	24983
Number of soundings revised	<i>Soundings illegible. Hard to tell how many revised.</i>
Number of signals erroneously plotted or transferred	...9..

Date: *Aug. 17, 1935*

Verification by *Jamcormick*

Time: *133 hr.*

Review by *Harold W. Murray*

Time: *17 "*

GEOGRAPHIC NAMES
NEW YORK

Date. May 1, 1935

Survey No. H5733

Chart No. 1215

Diagram No. 1215-2

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Old Mill Creek</u> ✓ ⁵⁴²	-----			
	<u>Hawtree Creek</u> ✓	-----			
	<u>Bergen Creek</u> ✓	-----			
	<u>Mud Creek</u> ✓	-----			
	<u>Hook Creek</u> ✓	-----			
	<u>Drover Creek</u>	-----			
	<u>Head of Bay</u> ✓	Same ✓			
	<u>Hassock Creek</u> ✓	-----			
	<u>Nigger Point</u> ✓	-----			
	<u>Hell Gate</u> ✓	-----			
	<u>Hell Gate Marsh</u> ✓	-----			
	<u>Grassy Bay</u> ✓	Same			
	<u>Goose Creek</u> ✓	-----			
	<u>Elders Point Marsh</u> ✓	-----			
	<u>Fresh Creek</u> ✓	-----			
	<u>Paardegat Basin</u> ✓	Same			
	<u>Duck Point Marshes</u> ✓	-----			
	<u>Pumpkin Patch Marsh</u> ✓	-----			
	<u>Black Bank Marsh</u> ✓	-----			
	<u>Rulers Bar Hassock</u> ✓	-----			
	<u>The Raunt</u> ✓ (a Channel)	-----			
	<u>The Raunt</u> ✓ (a R.R. Station)	Same			

APPROVED NAMES
UNDERLINED IN RED

Date May 1, 1935GEOGRAPHIC NAMES
NEW YORKSurvey No. H5733 Cont'dChart No. 1215Diagram No. 1215-2

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Jacks Hole</u> ✓	-----			
	<u>Broad Creek Marsh</u> ✓	-----			
	<u>Black Point</u> ✓	-----			
	<u>East High Meadow</u> ✓	-----			
	<u>Straight Creek</u> ✓	-----			
	<u>Straight Creek Marsh</u> ✓	-----			
	<u>Hassock Creek</u> ✓	-----			
	<u>Duck Creek Marsh</u> ✓	-----			
	<u>Hassock Point</u> ✓	-----			
	<u>Duck Creek</u> ✓	-----			
	<u>Jo Co Marsh</u> ✓	Same			
	<u>Droyers Creek</u> ✓	-----			
	<u>Green Point</u> ✓	-----			
	<u>Grass Hassock</u> ✓	-----			
	<u>Flat Hassock</u> ✓	-----			
	<u>Northwest Point</u> ✓	-----			
	<u>Uncle Daniels Point</u> ✓	-----			
	<u>Motts Point</u> ✓	-----			
	<u>Aunt Sallies Drain</u> ✓	-----			
	<u>Bass Channel Island</u> ✓	-----			
	<u>Bass Channel</u> ✓	-----			
	<u>Little Bay Marsh</u> ✓	-----			

APPROVED NAMES
UNDERLINED IN RED

GEOGRAPHIC NAMES
NEW YORK

Date. May 1, 1935

Survey No. H5735 Cont'd

Chart No. 1215

Diagram No. 1215-2

Approved by the Division of Geographic Names, Department of Interior. ✱

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Black Point</u> ✓	-----			
	<u>Grass Hassock Channel</u> ✓	Same			
	<u>Concha Hole Point</u> ✓	-----			
	<u>Jo Co Creek</u> ✓	-----			
	<u>Big Mucks Creek</u> ✓	-----			
	<u>Silver Hole Marsh</u> ✓	-----			
	<u>Winhole Hassock</u> ✓	-----			
	<u>Winhole Point</u> ✓	-----			
	<u>Goose Pond</u> ✓	-----			
	<u>Rulers Bar</u> ✓	-----			
	<u>Black Wall Marsh</u> ✓	-----			
	<u>Yellow Bar Hassock</u> ✓	-----			
	<u>Stony Creek</u> ✓	-----			
	<u>Stony Creek Marsh</u> ✓	-----			
	<u>Christianpol Marsh</u> ✓	-----			
	<u>Fishkill Hassock</u> ✓	-----			
	<u>Sails Point Hassock</u> ✓	-----			
	<u>OLD SWALE MARSH</u> ✓	-----			
	<u>Old Swale Marsh</u> ✓	-----			
	<u>NESTEPOL MARSH</u> ✓	-----			
	<u>Nestropol Marsh</u> ✓	-----			
	<u>Long Pol Bar</u> ✓	-----			
	<u>Island Channel</u> ✓	-----			
	<u>Johns Point Marsh</u> ✓	-----			

APPROVED NAMES
UNDERLINED NAMES

Date May 1, 1935GEOGRAPHIC NAMES
NEW YORKSurvey No. H5733 Cont'dChart No. 1215Diagram No. 1215-2

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Barren Island</u> ✓✓	Same			
	<u>Ruffle Bar</u> ✓	"			
	<u>Little Egg Marsh</u> ✓	-----			
	-----	<u>Beach Channel</u> ✓✓			
	<u>Big Egg Marsh</u> ✓	-----			
	<u>Brant Point</u> ✓	Same			
	<u>Little Bay</u> ✓✓	-----			
		<u>Big Fishkill Hassock</u> ✓✓			
		<u>Horse Channel</u> ✓✓			
		<u>Yankee Channel</u> ✓✓			
		<u>Black Wall Channel</u> ✓✓			
		<u>Goose Pond Marsh</u> ✓✓			
		<u>Long Bar</u> ✓✓			
		<u>Gt. Bar Marsh</u> ✓✓			
		<u>Pagan Creek</u> ✓✓			
		<u>Nigger Bar Channel</u> ✓✓			
		<u>Nigger Bar</u> ✓✓			
		<u>MOTTS CREEK</u> ✓✓			
		<u>NOVA SCOTIA BAR</u> ✓✓			
		<u>CORNELL CREEK</u>			
		<u>BIG FISHKILL CHAN</u>	Done after verifying		
		<u>SHELLBANK BASIN</u> ✓✓	APPROVED NAMES UNDERLINED IN FIELD		

Survey No. H-5733

Date. May 1, 1935

GEOGRAPHIC NAMES

Chart No. 1215

Diagram No. 1215-2

Approved by the Division of Geographic Names, Department of Interior. ✱

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

[illegible]

200

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 10, 1935

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in
15 volumes of sounding records for

HYDROGRAPHIC SHEET 5733

Locality Head of Bay to Barren Island, South Shore of Long Island, N.Y.

Chief of Party: M. O. Witherbee in 1934

Plane of reference is mean low water, reading

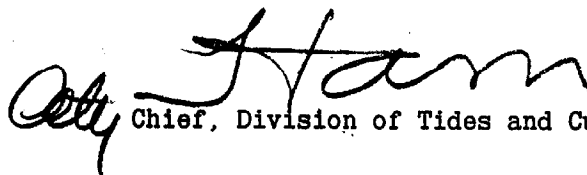
- 2.5 ft. on tide staff at Barren Island
- 9.1 ft. below B.M. 1
- 1.3 ft. on tide staff at Nortons Point, Jamaica Bay
- 8.6 ft. below B.M. 1
- 1.4 ft. at Mott Basin
- 10.0 ft. below B.M. 1
- 0.5 ft. on tide staff at Canarsie Beach
- 10.6 ft. below B.M. 1
- 2.0 ft. on tide staff at Beach Channel Bridge
- 36.4 ft. below B.M. 514B
- 0.5 ft. on tide staff at North Channel Bridge
- 14.4 ft. below B.M. "A"

Height of mean high water above plane of reference is 5.0 ft. at Barren Island;
5.4 ft. at Nortons Point, Jamaica Bay; 5.4 ft. at Mott Basin; 5.3 ft. at

~~Condition of records satisfactory except as noted below~~

Canarsie Beach; 5.2 ft. at Beach Channel Bridge; 5.2 ft. at North Channel Bridge
CONDITION OF RECORDS SATISFACTORY EXCEPT AS NOTED BELOW:

Frequently no tide observations at time of soundings made it necessary to
used interpolated tides for reducers. ~~On one occasion the locality of the work~~
~~was not indicated.~~


Chief, Division of Tides and Currents.

Verifier's Reports on H-5733.

Records:

Records are in good shape except as noted in the review.

Drafting:

Drafting is good as far as ~~plotting~~ plotting goes. Pencil drawing of soundings and making of shoreline was bad.

Remarks:

No descriptive report was submitted with this sheet.

Considerable extra time was taken by the verifier due to illegibility of penciled soundings, poor transfer of shoreline and general poor condition of the sheet.

17 foot sounding on cross line 95-96 e was omitted by verifier in favor in preference to 24 foot sounding in channel line between 71 and 72 c.

Note at position 110 f says "Tall red plotted buoy". Verifier has plotted buoy but has not given it a designation. Lat. $40^{\circ}36'15''$, Long. $73^{\circ}50'45''$

There is no indication of type of plotted buoy plotted at position 69 g. Lat. $40^{\circ}36'$, Long. $73^{\circ}50'$

Attention is called to spar buoy between 192-193 s. No color was given in the ^{plotted} records. Lat. $40^{\circ}36'9''$, Long. $73^{\circ}46'4''$

4 and 5 foot soundings on cross line 90-91 e' were not plotted by verifier. Note in record says they were probably a fathom shoal which was substantiated by numerous channel lines. ^{Revised accepted, X.M.M.}

Verifier has shown tops location (central sheet) of one wreck at Lat. $40-34.9$ Long. $73-52.3$. Best sheet shows two wrecks substantiated by notes in the records neither of which agree with tops location. Verifier's opinion is in favor of tops location. Verifier has taken air photo location of several wrecks in preference to hydrographic notes. Hyards

party did not take any actual fixes on wrecks, merely noting distance to right or left when passing on a sounding line.

See note 59b' p. 65 vol. 14. "2 meters from bulkhead. There is no bulkhead shown on photo compilation. Lat. 40-37.8 Long. 73-44.7. *

Three docks shown on smooth hydro sheet at Lat. 38-35.2 Long. 73-50.0 do not appear on photo compilation. *

Shoreline has been compared with air photo compilations T-⁵³³⁵~~5338~~, 5336, 5063, 5093 and 5094.

* Referred to Field Party Summary.

Aug. 17, 1935.

Submitted,

Jamel Carmick

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5733 (1934) FIELD NO. 3

Head of Bay to Barren Island, Jamaica Bay, South Shore
Long Island, New York

Surveyed in 1934

Instructions dated Aug. 16, 1934 (M. O. Witherbee)

Hand Lead and Pole Soundings.

3 Point fixes on shore signals.

Chief of Party - M. O. Witherbee.

Surveyed by - G. A. Stanton.

Protracted by - L. C. A. and W. N. M.

Soundings pencilled by - L. C. A., W. N. M. and G. C. M.

Verified and inked by - J. A. McCormick.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. A "Descriptive Report" which should have accompanied this sheet has never been received from the field. (Par. 166).
- b. Evidence that the transfer of signals had been checked in the field was lacking, since the initials of the checker were omitted. This was accomplished in the office.
- c. Frequent failure to obtain tidal observations at time of sounding necessitated the use of interpolated tides for reducers.
- d. No list of signals used was attached to the front page of the sounding records. (Par. 139).

2. Compliance with Instructions for the Project.

Aside from the fact that no Descriptive Report was submitted (see par. 1a, above) and consequently no information was available regarding the disposition of features discussed in paragraphs 6 and 7c(2) of this review, the plan, character and extent of the survey satisfy the instructions for the project, except that several areas were not covered (see par. 6 of this review) and in some cases the development was insufficient. (Entrance to Bergen Creek, latitude $40^{\circ}38.8'$, longitude $73^{\circ}48.9'$).

3. Sounding Line Crossings.

Agreement of soundings at crossings is satisfactory.

4. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn, with the exception of the low water curve in some of the shoal areas.

5. Junctions with Contemporary Surveys.

The junction on the west at the outlet of Jamaica Bay with H-5734 (1934) is satisfactory.

6. Comparison with Prior Surveys.

- a. H-129 (1841) H-1454 (1880)
 H-1358 (1877) H-2605 (1902)
 H-1392 (1878)

Comparison of the above surveys with the present survey reveals radical changes in depths and locations of channels, as well as shoreline. The information shown on these surveys has been superseded on the chart by later surveys and they need no further consideration.

- b. H-3697 (1914), H-3698 (1914), H-3705 (1914).

The above surveys, on scales of 1:10,000 cover the area of the present survey and much of the information on the chart originates with them. Comparison with the present survey shows that numerous changes in depths, location of shoals and channels, as well as shoreline, have occurred. Several charted shoals originating with H-3705 (1914), with least depths of from 3 to 6 feet, such as the shoal marked by buoy N in latitude 40°36.0', longitude 73°48.4', and another in latitude 40°35.6', longitude 73°48.9', as well as the three shoal spots in latitude 40°36.7', longitude 73°46.9', have shifted in position in some cases and apparently washed away in others. These surveys show no important features not covered by the present survey, together with U. S. Army Engineers' surveys and a more detailed comparison will serve no useful cartographic purpose.

The following areas, which are generally shoal and not of great importance, were not covered by the present survey:

Lat. 40°36.5', long. 73°52.0'; Lat. 40°38.2', long. 73°49.1'
 Lat. 40°37.7', long. 73°52.4'; Lat. 40°38.8', long. 73°48.5'
 Lat. 40°38.4', long. 73°52.4'; Lat. 40°37.6', long. 73°50.7'
 Lat. 40°38.5', long. 73°50.0'; Lat. 40°36.6', long. 73°48.0'

Comparison of the present soundings, at the limits of these blank areas, with those of the 1914 surveys shows that in practically all cases, changes have occurred. It is, therefore, not considered advisable to use the soundings of the 1914 surveys for charting the above areas.

Some hydrography in the areas of latitude 40°37.6', longitude 73°49.3', and latitude 40°37.1', longitude 73°49.2', would

have been desirable as the docks in the latter area indicate it is used by small boats. Two large channels immediately adjacent to these areas have been filled in since the 1914 surveys and these changes may have affected the depths. For this reason the soundings from H-3705 (1914) should not be used in charting this area.

Because of the many changes noted, the above surveys should be superseded by the present survey.

c. H-4868 (1928) H-4869 (1928).

These surveys, on scales of 1:10,000, cover the area of Island Channel and the northwestern portion of the present survey as far east as longitude 73°48', and the information on the chart in these areas originates with them. In general they are in only fair agreement with the present survey and changes from both natural and artificial causes were noted. Paerdegat Basin and the channel to Canarsie (latitude 40°37.4', longitude 73°53.3') have been dredged and the channel to Fresh Creek (latitude 40°38.2', longitude 73°52.6') has shoaled up from 8 to 10 feet. The channel in latitude 40°37.6' to latitude 40°38.4', longitude 73°48.8', has shoaled up from 3 to 4 feet. Because of these changes, these surveys should not be used for charting within the areas adequately covered by the present survey. However, in some of the flat shoal areas, not covered by the present survey (see par. 6b), these soundings may be used provided they are in agreement where they join the present soundings. Two iron pipes (charted) and a stake (charted) are shown on H-4869 (1928) in the general vicinity of latitude 40°38.6', longitude 73°48.9'. These were not located on the present survey, and they have been added to a section of the chart to be forwarded to the field party for additional information. They should be retained on the chart pending a reply.

d. T-3476 (1914), T-3478 (1914), T-4325 (1927), T-4407 (1928) and T-4408 (1928).

A number of sunken wrecks, cribbing, piles, etc. (all charted) originating with the above topographic surveys and one or two other sources are not shown on the present survey nor on the contemporary Air Photo Compilation. Indications of several of these features may be found on the Aerial Photographs, but since the photographs in some cases were obtained at or near half tide, the evidence is not sufficiently conclusive for final disposition. These features, accompanied by their respective sources, are noted on a section of Chart No. 542 (copy attached to this review) which has been sent to the field party for information concerning them.

7. Comparison with Chart No. 542 (Corrected to Oct. 29, 1934).a. Hydrography.

Soundings shown on the chart originate with surveys discussed in preceding paragraphs of this review and numerous U. S. Army Engineers' surveys, the more important of which are Blue prints 25556 (1932), and Blue prints 25560 to 25563 (1932) inclusive, which cover Island Channel on the west. Soundings are generally in close agreement with the present survey, except the 29 foot sounding in latitude $40^{\circ}35.8'$, longitude $73^{\circ}52.6'$, and the 27 in latitude $40^{\circ}36.2'$, longitude $73^{\circ}52.86'$ (both charted) which vary 2 to 5 feet shoaler than soundings on the present survey. The development on H-5733 (1934) is not sufficiently close to disprove these soundings and they should be retained on the chart. Also, the 13 foot shoal sounding (charted) in latitude $40^{\circ}35.33'$, longitude $73^{\circ}49.28'$ originating with Blue print 26645 (1933) should be retained for the same reasons. In the vicinity of latitude $40^{\circ}34.9'$, longitude $73^{\circ}52.5'$, a few soundings on Blue print 27794 (1934), which is contemporary with the present survey, are in close agreement in some cases but vary 8 to 11 feet shoaler than soundings on H-5733 (1934) in depths of 55 feet or more. For charting purposes, it will be necessary to use both surveys.

b. Controlling Depth in Channels.

The charted controlling depth in Paerdegat Basin originating with Blue print 25105 (1932) is 18 feet. A small shoaling in many areas is indicated on the present survey and the maximum depth that can now be carried on the greater part of the basin is 16-1/2 feet.

c. Aids to Navigation.

- (1) The following buoys located on the present survey are not shown on the chart:

Red buoy;	Lat. $40^{\circ}36.1'$, long. $73^{\circ}50.4'$
Black "	Lat. $40^{\circ}36.0'$, long. $73^{\circ}50.0'$
Spar "	Lat. $40^{\circ}36.9'$, long. $73^{\circ}46.4'$

- (2) The following charted buoys were not located on the present survey. Their present existence is uncertain and they have been indicated on a section of Chart 542 and referred to the field party. (See par. 6b of this review):

Red buoy;	N4A; Lat. $40^{\circ}35.25'$, long. $73^{\circ}52.35'$
Black "	C3; Lat. $40^{\circ}35.8'$, long. $73^{\circ}52.8'$
Black "	C5; Lat. $40^{\circ}36.14'$, Long. $73^{\circ}47.7'$

- (3) The following buoys are shown on the present survey in positions varying 10 to 240 m. from their charted positions and do not at present correctly mark the features intended. Several of the buoys mark the positions of shoals which have disappeared in some cases and shifted in others.

Black Buoy C1;	Lat. 40°38.1', long. 73°52.3'
" " C3;	Lat. 40°38.1', long. 73°52.1'
Hor. Striped Buoy N;	Lat. 40°35.56', long. 73°48.9'
" " " N;	Lat. 40°36.0', long. 73°48.4'
Black Buoy S7;	Lat. 40°37.6', long. 73°46.3'
Red " S4;	Lat. 40°37.6', long. 73°46.4'

Other buoys are located in approximately their charted positions and their distance off station does not constitute a menace to navigation. However, these buoys, as well as those discussed in the above paragraphs have probably been replaced on station by the Lighthouse Bureau.

8. Field Plotting.

Field protracting and plotting are accurate and conform to the requirements of the Hydrographic Manual, except that a considerable number of pencilled soundings were illegible.

9. Additional Field Work Recommended.

Except as noted in paragraphs 6 and 7c(2) of this review, this survey is completed. When possible, sounding lines should be run in the areas of latitude 40°37.1', longitude 73°49.2', and latitude 40°37.6', longitude 73°49.3'. The flat shoal areas mentioned in par. 6b are hardly of enough importance to warrant additional work. However, in most of these areas the low water line is not well defined.

10. Superseding Previous Surveys.

Within the area covered, H-5733 (1934) supersedes the following surveys for charting purposes:

H-129 (1841)	In part
H-1358 (1877)	" "
H-1392 (1878)	Entirely
H-1454 (1880)	In part
H-2605 (1902)	" "
H-3697 (1914)	" "
H-3698 (1914)	Entirely
H-3705 (1914)	"
H-4868 (1928)	In part (except as noted in par. 6c)
H-4869 (1928)	Entirely (except as noted in par. 6c)

11. Reviewed by - Harold W. Murray and R. L. Johnston, Aug. 31, 1935.
12. Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green.
C. K. Green,
Chief, Section of Field Records.

J. Borden
Chief, Section of Field Work.

L. O. Lobbut.
Chief, Division of Charts.

G. Hude
Chief, Division of H. & T.

Applied to chart 542 27m-a. July 6, 1936 25 f 17, 1936
END